ENDANGERED SPECIES

Southwestern Willow Flycatcher (Empidonax traillii extimus)

The southwestern willow flycatcher is a subspecies of one of the ten North American flycatchers in the genus Empidonax. The approximate boundary of the breeding ranges of the *E. traillii extimus* and *E. traillii adastus* (the neighboring subspecies to the north) meet in southern Utah. The Final Rule listing the southwestern willow flycatcher to be an endangered species shows this boundary such that willow flycatchers documented on the Fishlake National Forest could be *E. t. extimus* (USFWS 1995c). Further studies are needed to confirm taxonomy in these boundaries between subspecies.

Willow flycatchers have been sighted on the Loa Ranger District of the Fishlake National Forest. Formal forest-wide surveys within suitable habitat have been initiated for the willow flycatcher; as well as informal project level surveys for each project within suitable habitat. Based on verbal communications with Dr. Frank Howe, avian biologist with the Utah Division of Wildlife Resources in Salt Lake City, and a study by Paxton (2000) the willow flycatcher observations on the Fishlake National Forest are not the endangered race (Empidonax *extimus*). This conclusion is based on communications with Dr. Mark Sogge, a leading southwestern willow flycatcher scientist.

San Rafael cactus (Pediocactus despainii)

This member of the cactus family (Cactaceae) is a small depressed-hemispheric plant about 3.8-6 cm tall. Its spines are pale yellowish in color, are relatively short (the longest of which are a little over 4mm long), and they are not obscured by it's pale yellow and caducous woolly hairs. Its fruit is green, drying reddish brown in color, smooth in texture, and an obovoid shape. Its seeds are shiny black. Its flowers are yellowish to peach in color (Atwood et al. 1991).

This species is endemic to central Utah in Emery County. It prefers open pinyon-juniper communities on limestone gravels between 6,000-6,200 feet in elevation (Atwood et al. 1991). This species most commonly occurs on gentle slopes, benches, and hilltops generally found on sites with a southern exposure. It blooms from March to May with fruiting from May to June. These times vary from season to season depending on moisture conditions and temperature of late winter/early spring. The lower populations will normally flower between 5-15 days earlier than the upper elevations. Reproduction is sexual and pollination is achieved by flying insects (Heil 1984a).

During much of the year, this species will shrink underground defending itself against the harsh climatic conditions. It resurfaces in the spring depending on winter or spring moisture. This species is closely related to *P. winkleri*.

P. despainii was listed as an endangered species under the authority of the Endangered Species Act (ESA) of 1973, as amended on September 16, 1987 (52 FR 34917).

This species was found on the Loa Ranger District of the Fishlake National Forest. This site extended the known range of *P. despainii* 50 miles to the southwest and 3,000 feet in elevation. Another separate population was discovered on the Loa Ranger District during the 1999 field survey season (Clark 1999c).